AMENDMENT TO CLAIMS

This listing of claims replaces all prior listings, and versions, of claims in the application.

- 21. (New) An inhibitor of the sSEP or a functional active soluble derivative thereof or of the SEP as defined in SEQ ID NO: 2, 4 or 6 or of a functional active derivative thereof.
- 22. (New) The inhibitor of claim 20, wherein the derivative of sSEP exhibits a sequence homology of at least 25 % to the sSEP.
- 23. (New) The inhibitor of claim 1, wherein the sSEP or functional derivative thereof is devoid of a transmembrane domain of SEP or of a functional active variant thereof.
- 24. (New) The inhibitor of claim 20, wherein the sSEP or functional derivative thereof has a C-terminal amino acid corresponding to amino acid 510, 249, 246, 242, 171 or 167 of SEP according to SEQ ID NO: 4 or has a C-terminal amino acid corresponding to the equivalent amino acid of a sSEP derivative.
- 25. (New) The inhibitor of claim 20, wherein the sSEP or functional derivative thereof has the sequence as shown in any of SEQ ID NO: 7 to 18.
- 26. (New) The inhibitor of claim 20, selected from the group consisting of antibodies, peptides, fragments of SEP, antisense oligonucleotides, siRNA, Low molecular weight molecules (LMWs) and SEP receptor antagonists.

- 27. (New) The inhibitor of claim 25, wherein the inhibitor is an antibody, preferably a polyclonal or monoclonal antibody or fragment thereof.
- 28. (New) The inhibitor of claim 25, wherein the inhibitor is a fragment of SEP, preferably a peptide having the sequence as shown in SEQ ID NO: 26 or 27.
- 29. (New) A method for the treatment of cancer, rheumatoid arthritis, psoriasis, artherosclerosis, retinopathy, osteoarthritis, endometriosis or chronic inflammation, wherein an effective amount of an inhibitor as defined in claim 1 is administered to a patient in need thereof.
- 30. (New) The method of claim 28, wherein the inhibitor prevents the formation of vascular vessels in the tumor tissue.
- 31. (New) The method of claim 28, wherein the inhibitor inhibits the production of VEGF, IL-8 and/or RANTES.
- 32. (New) The method of claim 28, wherein the cancer is selected from the group consisting of brain cancer, pancreas carcinoma, stomach cancer, colon carcinoma, skin cancer, especially melanoma, bone cancer, kidney carcinoma, liver cancer, lung carcinoma, ovary cancer, mamma carcinoma, uterus carcinoma, prostate cancer and testis carcinoma.
- 33. (New) The method of claim 28, wherein additionally a VEGF inhibitor is administered.

34. (New) A method for the identification of a SEP inhibitor, wherein a potential inhibitor is tested for its activity to block the effects of SEP or of a functional derivative thereof.